

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002420**Date Inspected:** 28-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shaqng hai, China**CWI Name:** Li Li Qing, Wu Meng Kai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** See Below**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector, M. Paul Stovall, was present at Zhenghua Port Machinery Company (ZPMC) on Changxing Island, Shanghai, China to monitor the Quality Control (QC) functions during the fabrication of the Self Anchored Suspension (SAS) section of the San Francisco/Oakland Bay Bridge.

OBG Preassembly Bay 3

The QA Inspector observed ZPMC welders Wang Zhonghua, ID #053753, Lv Peng, Han Xiaofeng, ID #054467, Li Zhaoqian, ID #048810, and Zhang Feng, ID #049769 fit and tack weld WT stiffeners onto Side Plates (SP) SP122-001, SP335-001, SP 361-001, and SP148-001.

The QA Inspector observed ZPMC welders Li Mengqian, ID #054460, Xin Meng, ID #053742, and Liu Zheng, ID #062447 weld fillet welds on SP308-001 at the rear gantry welder.

The QA Inspector observed ZPMC personnel check the faying surface of cut WT's for flatness; ZPMC welder Lv Peng, ID #048617 weld lifting lugs onto SP309-001; and fabrication personnel cut bevel groove angles onto plate material for Side Plates.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

OBG Preassembly Bay 4

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The QA Inspector observed ZPMC personnel back gouge the weld root on Internal Tower Diaphragm Plate WSD1-SA268-16B, using Weld Procedure Specification (WPS) WPS-B-T-3221-B-U3c-S-1.

The QA Inspector observed ZPMC personnel fit and tack weld Internal Tower Diaphragm plate numbers P1297 to SA234 no weld number is given.

The QA Inspector observed ZPMC personnel weld fill passes on Internal Tower Diaphragm Plate weld number NSD1-SA27-A/B-1B (1A). This is a Submerged Arc Weld (SAW) and the welder is Gu Caihong, ID #053748.

The QA Inspector observed ZPMC personnel grind fillet welds on welded Side Plates and Bottom Plates and for ZPMC welder Dai Lu, ID #048659 to make minor weld repairs.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

OBG Preassembly Bay 7

The QA Inspector observed ZPMC personnel fit and tack weld edge plate stiffeners onto Floor Beams (FB) FB013-008-007, and FB003-047. The ZPMC welder is Liu Xie, ID #066236, and these are Shielded Metal Arc Welds (SMAW).

The QA Inspector observed ZPMC personnel fit and tack weld plate stiffeners to Floor Beams FB003-032, and FB003-033-005 and other ZPMC personnel drilled bolt holes into FB022-02.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

OBG Preassembly Bay 8

The QA Inspector observed ZPMC welder Ma Ying, ID #054270 using the SAW weld process to weld fill passes on Internal Tower Diaphragm Plate joint number NSD1-SA311-A/B-1B (2B) using WPS-B-T-3221-U3c-S-1. The QA Inspector verified the WPS parameters as 602 amperes (amps), 31.6 volts, and a travel speed of 475 mille-meters (mm).

The QA Inspector observed ZPMC personnel back gouge the weld root on Internal Tower Diaphragm Plates WSD1-SA290-11B (12B); and on SSD1-SA311-A/B-1A (2A), ZPMC personnel back gouged sections of the SAW weld root placed between SMAW weld tacks.

The QA Inspector observed ZPMC QC personnel checking the radiuses of heat straightened Diaphragm flanges.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

Summary of Conversations:

The QA Inspector had no significant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

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remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Stovall,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
